



VERIFICATION OF TRANSLATION

I, Takashi KOJIMA, a Japanese patent attorney,
hereby declare as follows:

That I am familiar with the Japanese and English
languages;

That I am capable of translating from Japanese to
English;

That the translation attached hereto is a true and
accurate translation of specification in respect of an
application for a Japanese patent filed on July 12,
1990 entitled Method and Apparatus for Manufacturing
Quartz-Based Optical Waveguide,

That all statements made herein of my own
knowledge are true and that all statements made on
information and belief are believed to be true, and
further that these statements were made with the
knowledge that willful false statements and the like so
made are punishable by fine or imprisonment, or both,
under Section 1001 of Title 18 of the United States
Code and that such willful false statements may
jeopardize the validity of the application or any
registration resulting therefrom.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the
U.S. Postal Services as First Class Mail in an envelope addressed to:
Commissioner of Patents, P O Box 1450, Alexandria, VA 22313-
1450 on: FEBRUARY 9, 2004
Name: SHARON MCDANIEL
Signature: Sharon McDaniel

By: Takashi Kojima
Takashi KOJIMA

Executed this 30th day of January 2004.